

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-30. (cancelled)

31. (currently amended) A biocompatible ceramic composition comprised of powdered calcium aluminate phases of the following composition:

less than 50 vol.%, but greater than zero, of CA_2 , based on the total volume of the calcium aluminate phases;

more than 50 vol.%, ~~but greater than zero,~~ of a mixture of CA and $C_{12}A_7$, together based on the total volume of the calcium aluminate phases;

less than 10 vol.%, but greater than zero, of C_3A , based on the total volume of the calcium aluminate phases; and

optionally additives, wherein,

the sum of all components amounts to 100 %, and wherein the CA-phases amounts to at least 50%, and

the biocompatible ceramic composition generates temperatures of 30-150°C when cured in a living human body.

32. (previously presented) The biocompatible ceramic composition according to claim 31, further comprising the

hydraulic powders calcium silicate and/or calcium sulphate in an amount less than 50 vol.% of the total volume of hydraulic ingredients.

33. (previously presented) The biocompatible ceramic composition according to claim 31, further comprising particles or powder of one or more biocompatible materials selected from the group consisting of calcium carbonate, calcium phosphate, apatite, fluoroapatite, carbonates-apatites, and hydroxyapatite in a total amount less than 30 vol.% of the total volume of the ceramic ingredients.

34. (previously presented) The biocompatible ceramic composition according to claim 31, further comprising a component which is a water reducing agent selected from the group consisting of polycarboxylic acids, polyacrylic acids, and superplasticisers.

35. (previously presented) The biocompatible ceramic composition according to claim 31, further comprising expansion controlling additives.

36. (previously presented) The biocompatible ceramic composition according to claim 31, further comprising a water-based curing liquid.

37. (previously presented) The biocompatible ceramic composition according to claim 36, wherein the curing liquid further comprises an accelerator agent which accelerates the hardening process, which accelerator agent is selected from the group consisting of lithium chloride, lithium hydroxide, lithium carbonate, lithium sulphate, lithium nitrate, lithium citrate, calcium hydroxide, potassium hydroxide, potassium carbonate, sodium hydroxide, sodium carbonate, sodium sulphate and sulphuric acid.

38. (previously presented) The biocompatible ceramic material according to claim 37, wherein LiCl is present in an amount of 10-500 mg in 100 g of curing liquid.

39. (previously presented) The biocompatible ceramic composition according to claim 36, wherein the curing liquid further comprises a retarder agent which retards the hardening process, which retarder agent is selected from the group consisting of polysaccharide, glycerine, sugars, starch, and cellulose-based thickeners.

40. (previously presented) The biocompatible ceramic composition according to claim 31, wherein the grain size of the powdered material used is predominately less than 20 microns.

41. (previously presented) The biocompatible ceramic composition according to claim 31, having a compressive strength of at least 100 MPa.

42. (previously presented) The biocompatible ceramic composition according to claim 31, the composition being cured.

43. (previously presented) A method for manufacturing a biocompatible ceramic composition according to claim 31, comprising the steps of:

preparing a calcium aluminate/powder mixture of selected phase composition and grain size; and

curing said mixture by treating the biocompatible ceramic composition with a curing agent, or by preparing a slurry from said water-based curing liquid and the biocompatible ceramic composition, wherein,

the amount of CA_2 and the amount of C_3A is selected for achieving temperatures up to 150°C during use and so that the biocompatible ceramic composition generates a controlled amount of heat at temperatures of 30-150°C when cured in a living human body.

44. (previously presented) A medical implant comprising the biocompatible ceramic composition according to claim 31.

45. (previously presented) An orthopaedic implant comprising the biocompatible ceramic composition according to claim 31.

46. (cancelled)

47. (previously presented) A medical implant comprising the biocompatible ceramic composition according to claim 32.

48. (previously presented) An orthopaedic implant comprising the biocompatible ceramic composition according to claim 32.

49. (cancelled)

50. (previously presented) A medical implant comprising the biocompatible ceramic composition according to claim 33.

51. (previously presented) An orthopaedic implant comprising the biocompatible ceramic composition according to claim 33.

52. (cancelled)

53. (previously presented) A medical implant comprising the biocompatible ceramic composition according to claim 34.

54. (previously presented) An orthopaedic implant comprising the biocompatible ceramic composition according to claim 34.

55. (cancelled)

56. (previously presented) A medical implant comprising the biocompatible ceramic composition according to claim 35.

57. (previously presented) An orthopaedic implant comprising the biocompatible ceramic composition according to claim 35.

58. (cancelled)

59. (previously presented) A medical implant comprising the biocompatible ceramic composition according to claim 36.

60. (previously presented) An orthopaedic implant comprising the biocompatible ceramic composition according to claim 36.

61. (cancelled)

62. (previously presented) A medical implant comprising the biocompatible ceramic composition according to claim 37.

63. (previously presented) An orthopaedic implant comprising the biocompatible ceramic composition according to claim 37.

64. (cancelled)

65. (previously presented) A medical implant comprising the biocompatible ceramic composition according to claim 38.

66. (previously presented) An orthopaedic implant comprising the biocompatible ceramic composition according to claim 38.

67. (cancelled)

68. (previously presented) A medical implant comprising the biocompatible ceramic composition according to claim 39.

69. (previously presented) The biocompatible ceramic composition of claim 31, with at least an effective amount for

achieving high temperatures during use and less than 3 vol.% of C_3A , based on the total volume of the of calcium aluminate phases.

70. (currently amended) A biocompatible ceramic composition comprised of powdered calcium aluminate phases of the following composition:

less than 50 vol.%, but greater than zero, of CA_2 , based on the total volume of the calcium aluminate phases;

more than 50 vol.%, ~~but greater than zero,~~ of a mixture of CA and $C_{12}A_7$, together based on the total volume of the calcium aluminate phases;

at least an effective, non-zero, amount of C_3A for achieving temperatures up to $150^{\circ}C$ during use and less than 10 vol.%, but greater than zero, of C_3A , based on the total volume of the calcium aluminate phases; and

optionally additives, wherein,

the sum of all components amounts to 100 %, and wherein the CA-phases amounts to at least 50%, and

the biocompatible ceramic composition generates temperatures of $30-150^{\circ}C$ when cured in a living human body.